

Remarks:

Claims 1, 2, 4-11, and 13-16 are pending. Claims 3, 11-12 and 17 – 21 are canceled. Claims 1, 2, 4-11, and 13-16 are rejected under 35 U.S.C. 103(a). This application is amended by the virtue of this response, pursuant to 37 CFR 1.111. Please amend the claims as provided above. No new matter is added. Support for the amended or the new claims is provided within the specification and the claims as filed.

The Applicant is not conceding that the subject matter recited in the amended or canceled claims is not patentable over the art cited by the Examiner. The amended, withdrawn or canceled claims are provided solely to facilitate expeditious prosecution of the allowable subject matter. Applicant respectfully reserves the right to pursue claims, including the subject matter encompassed by the amended or cancelled claims in one or more continuing applications.

Claim of Priority & Figures:

Applicant notes that the Examiner has not acknowledge the Applicant's claim of foreign priority under 35 U.S.C. § 119(a). None of the boxes were marked on the Office Summary page. Please let us know if all, some or none of the copies have been received. Applicant notes that none of the boxes were marked on the Office Summary page to indicate that the Examiner has accepted the Drawings.

§103 Rejection(s):

Claims 1-2, 4-11 and 13-16 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Pub. No. 2003/0002476 to Chung et al. (hereafter "Chung"), in view of U.S. Pub No. 2004/0028034 to Greis (hereinafter "Greis") in further view of U.S. Patent No. 7,075,951 (McClary). Claims 8-9 and 11 are rejected for the same reasons as discussed above with respect to claim 1. The rejections are respectfully traversed.

The claimed subject matter is directed to a method of generating a ring back tone at a first terminal in communication with a second terminal, wherein the first terminal communicates over a first network implemented over voice over internet protocol (VOIP), and wherein the second

terminal communicates over a second network connected to the first network. The method comprises:

(1) identifying type of the second network over which the second terminal communicates to determine whether the second terminal expects to receive a ring back tone, in response to an attempt by the second terminal to establish a connection between the first terminal and the second terminal over both the first and second networks;

(2) if the type of the second network over which the second terminal communicates is a PSTN, generating ring back tone data at the first terminal independent of any functions available at a public switched telephone network (PSTN) switchboard or an access gateway for generating the ring back tone;

(3) storing the generated ring back tone data in a buffer of the first terminal; and

(4) inserting the ring back tone data into a response message forwarded from the first terminal to the second terminal after reading out the ring back tone data from the buffer;

(5) wherein the ring back tone data is inserted into the response message according to a first-in first-out method,

(6) wherein the first network and the second network are connected by way of a trunk gateway,

(7) wherein the response message is transmitted to the second terminal through a port allocated for enabling communication between the first terminal and the second terminal by the trunk gateway during a call setup process initiated by the second terminal,

(8) wherein the second terminal receives the response message and locally generates a ring back tone by using the ring back tone data included in the response message,

(9) such that the second terminal generates the ring back tone by way of replaying the ring back tone data in the response message forwarded from the first terminal, without relying on functionalities within the first network or the second network to generate the ring back tone.

It is noteworthy that in the claims “[a] functional limitation must be evaluated and considered, just like any other limitation of the claim, for what it fairly conveys to a person of ordinary skill in the pertinent art in the context in which it is used. A functional limitation is often used in association with an element, ingredient, or step of a process to define a particular capability or purpose that is served by the recited element, ingredient or step.” MPEP § 2173.05.

As provided in further detail below, the cited references fail to teach and suggest all the above-noted elements and functional relationship recited in the pending claims.

Chung discloses a gateway call routing system used to route calls, wherein the gateway connects a PSTN and the Internet. The call routing system includes a first computer connection module for connecting to a computer terminal, such as an Internet voice terminal, of a calling party, and a first phone connection module for connecting to a phone terminal of the calling party. In addition, the call routing system includes a second computer connection module for connecting to a computer terminal of a called party, and a second phone connection module for connecting to a phone terminal of the called party.

The Office Action contends that Chung in paragraph [0028] suggests the claimed feature for the second terminal transferring a ring signal in response to receiving a call connection request from another terminal. A careful reading of paragraph [0028] reveals that Chung does not teach that a ring signal is generated by the terminal itself, rather it discloses that the “PSTN 114” generates the ring signal. Respectfully, the Office Action does not appreciate this difference as to the source of generation of the ring back tone which is one of the points that distinguishes the claimed subject matter from Chung and the other cited references.

To appreciate the difference, the following explanation about the nature of telephony systems in PSTN and VOIP networks is provided. In a traditional telephony network, such as a PSTN, the exchange circuitry in the PSTN monitors and controls the generation and transmission of dial and ring back tones. For example, the exchange circuitry in the PSTN will determine whether a line is busy or available. If busy, a busy ring back tone is generated, and if available, a ring tone is generated. The ring back tones are then routed from the PSTN exchange circuitry (and not from the call receiving terminal) to the calling terminal. It is noteworthy that neither the calling terminal nor the call receiving terminal are equipped or configured to independently generate a ring back tone or signal in a PSTN system. It is further appreciated that, in a telephony network built on pure VOIP, the PSTN exchange is not available to manage and provide the above functionality. That is, in absence of a PSTN or an alternative mechanism to

generate a ring back tone, a calling party in a VOIP system will hear silence when a call connection is established.

Accordingly, the challenge in the system recited in the pending claims is to overcome the above problem where one terminal is communicating over a PSTN and another terminal communicates over a VOIP network. If a first terminal in a VOIP network is receiving a call from a second terminal in a PSTN, the VOIP network does not have the capability of a PSTN exchange for managing and generating a ring back tone. For that reason, according to one embodiment of the claimed subject matter, the first terminal in the VOIP network is configured to generate the ring back tone independently, because there is no PSTN exchange implemented on the VOIP network to provide the respective service. In other words, the first terminal is configured to make up for the lack of PSTN exchange circuitry on the receiving end that would have provided a similar function had the first terminal was communicating over a PSTN.

Referring back to Chung, FIGS. 1, 2 and 3 and the related paragraphs in Chung's specification make is explicitly clear that the PSTN exchange circuitry is available on both ends of the communication network (see PSTN 114 on one side, and PSTN 106 on the other side). As it is clear from a careful reading of Chung, the PSTN exchange system is available on both the receiving and calling ends to manage the generation of ring back tones when a call is established between the calling and receiving terminals. As such, despite the Office Action's continued insistence that Chung suggests that the ring back tone is generate by the call receiving terminal independently, Chung actually directly teaches away from the first terminal independently generating ring back tone data, as recited in claim 1.

Please note that Chung suggests that a ring signal (i.e., the ring back tone data) is generated by PSTN 114 and sent to the calling party. See paragraph [0023] and FIG. 3 of Chung. In contrast, claim 1 recites that the ring back tone is independently generated by the by the first terminal without any help from a PSTN switchboard or access gateway. See present applications Specification, paragraph [0052]. Therefore, a person of ordinary skill in the art could not be motivated to combine Chung with any other reference as the resulting combination would also teach away from the first terminal independently generating ring back tone data.

The Office Action also makes three additional and critically false observations without providing any support or reasoning:

First, the Office Action contends that “the claimed feature of ‘identifying a type of a network to which the second terminal requesting the call setup’ is *obvious* if not *inherent* within the teachings of Chung (see for example, call setup between the two networks 0028).” The section to which the Office Action refers provides no support for the proposition that Chung teaches either explicitly or implicitly that the type of a network from which a calling party communicates is identified in response to receive a call set up request. Conversely, in Chung, since both sides include a PSTN telephony network, there is no reason to determine the type of the network from which a call is generated because the PSTN exchange, on the receiving end, generates a ring back tone regardless of the type of the network, in response to receiving a call set up request.

Second, the Office Action goes on to say that generation of a ring back tone is obvious, but it does not consider the context and all the additional relationships and functional languages that have been recited in the pending claims that specify the point in time, the order, and the conditions in which the ring back tone is generated. The Examiner is requested to more carefully review the amendments to the pending claims that recite such relationships and functional elements, and to point out with more specificity the portion of the references that teach every one of said elements and limitations. Otherwise, it is respectfully requested that the 103 grounds of rejection to be withdrawn.

Third, the Office Action contends that the newly cited reference Greis in paragraph [0007] teaches that a ring back tone data is generated independently by the first terminal if the type of the network is a PSTN. The Applicant has carefully reviewed the cited portion of Greis and respectfully submits that Greis in that paragraph suggests that the *calling* terminal will have to generate the ring back tone independent of the telephony system. In direct contrast to Greis, in the claimed subject matter, the first terminal (i.e., the call receiving terminal) – not the calling terminal – is the terminal that generates the ring back tone data. Said data is then stored in the

first terminal's buffer and then transmitted via a VOIP packet to the second terminal (i.e., the calling terminal). The calling terminal then generates the ring tone based on the ring tone data transmitted to it from the first terminal. It would be greatly appreciated if the Examiner more carefully considers the differences between the functionalities associated with the 'calling terminal' and the 'call receiving terminal' while examining the claims.

For the above reasons, neither of the above-recited implementations and features are disclosed by Greis. As such, Greis fails to cure the deficiencies of Chung. McClary also fails to cure the deficiencies of Chung and Greis. Particularly, McClary is directed to a storage unit to store data from a data signal, and a control circuitry coupled to the storage unit. The control circuitry is to cause the storage of the data from the data signal into the storage unit at a nominal rate upon determining that the data signal includes a number of errors.

In summary, Chung, Greis and McClary, either alone or in combination fail to disclose that a first terminal communicating over a VOIP network generates ring back tone data independent of a PSTN switchboard or an access gateway when the type of the network is a PSTN. Further, neither of the references teach that the second terminal generates the ring back tone by itself, if the type of the network is not the PSTN. It is respectfully noted that §103 does not allow the Examiner to engage in a picking and choosing from the prior art only to the extent that it will support a holding of obviousness, while excluding parts of the prior art essential to the full appreciation of what the prior art suggests to one of ordinary skill in the art. *In re Wesslau*, 147 USPQ 391 (CCPA 1975).

The question of whether a cited reference can properly be modified in a §103 rejection is not whether a particular limitation was known at time of invention, but rather whether there is a reason that would make it obvious for one of ordinary skill in the art at the time of the invention to modify the cited reference to include that particular limitation. As the U.S. Supreme Court has affirmed, "a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art... it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant

field to combine the elements in the way the claimed new invention does." See *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741, 82 USPQ 2d 1385, 1397 (2007).

Additionally, it is improper to use Applicant's disclosure as a road map for selecting and combining prior art references. See *Grain Processing Corp. v. American Maize-Products Corp.*, 840 F.2d 902, 907 (Fed. Cir. 1988). Applicant respectfully submits that in the absence of any legitimate reason that it would be obvious to combine the cited references, the Office Action has used Applicants' claims as a road map for modifying the cited reference.

While the suggestion to modify this reference may come from the knowledge and common sense of a person of ordinary skill in the art, the fact that such knowledge may have been within the province of the ordinary artisan does not in and of itself make it so, absent clear and convincing evidence of such knowledge. *C.R. Bard, Inc. v. M3 Systems, Inc.*, 157 F.3d 1340, 1352, 48 U.S.P.Q.2d 1225, 1232 (Fed. Cir. 1998).

Here, the modification proposed by the Examiner is not based on any clear and convincing evidence of a reason, suggestion, or motivation in the prior art that would have led one of ordinary skill in the art to combine the references. Rather, the reason, suggestion and motivation for the combination of references proposed by the Examiner simply is impermissible hindsight reconstruction given the benefit of Appellant's disclosure.

The Federal Circuit has consistently held that hindsight reconstruction does not constitute a prima facie case of obviousness under 35 U.S.C. § 103. *In re Geiger*, 2 USPQ2d 1276 (Fed Cir. 1987). Unfortunately, the Examiner rather than pointing to what the prior art discloses and teaches as to making the suggested modification relies on assumptions and statements without any support in the record. As such, the Examiner's statements regarding obviousness and motivation to modify are but shortcuts to a conclusion of obviousness devoid of the required analytical approach based on what is actually disclosed in the prior art.

Reliance on impermissible hindsight to avoid express limitations in the claims and setting forth unsupported hypothetical teachings to recreate the Applicant's claimed invention cannot

establish a prima facie case of obviousness. Since obviousness may not be established by hindsight reconstruction, Applicant invites the Examiner to point out the alleged motivation to combine with specificity,¹ or alternatively provide a reference or affidavit in support thereof, pursuant to MPEP §2144.03.²

Since no reasonable justification is provided in the Office Action as to how such modification or combination is possible and obviousness may not be established based on hindsight and conjecture, it is respectfully requested that the §103 rejection be withdrawn. For the above reasons, none of the cited references, either alone or in combination, teach or suggest all the elements recited in the claims. Therefore, it is respectfully submitted that the claims are in condition for allowance.

No amendment made was related to the statutory requirements of patentability unless expressly stated herein; and no amendment made was for the purpose of narrowing the scope of any claim, unless Applicants have expressly argued herein that such amendment was made to distinguish over a particular reference or combination of references.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to contact the undersigned attorney at the Los Angeles, California, telephone number (213) 623-2221 or jfar-hadian@ihlaw.com to discuss the steps necessary for placing the application in condition for allowance.

Respectfully submitted,

Date: August 9, 2010

By /F. Jason Far-hadian/
F. Jason Far-hadian, Esq.
Registration No. 42,523

Customer No. 035884

¹ *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984).

² "The rationale supporting an obviousness rejection may be based on common knowledge in the art or "well-known" prior art . . . If the applicant traverses such an assertion the examiner should cite a reference in support of his or her position. When a rejection is based on facts within the personal knowledge of the examiner . . . the facts must be supported, when called for by the applicant, by an affidavit from the examiner."